

We Claim:

- 1 1. A method of protecting the chilled water tubes in the evaporator of an
2 absorption machine in the event the chilled water flows through the evaporator is
3 terminated while the machine is running that includes the steps of:
4 monitoring the flow of chilled water through the evaporator tubes,
5 signaling the machine controller to initiate a machine shut down procedure in
6 the event the chilled water flow has terminated; and
7 delivering a working fluid from a high temperature region of the machine to
8 said evaporator to raise the temperature within the evaporator above a level at which
9 the water in said evaporator tubes freezes.
- 1 2. The method of claim 1 wherein said working fluid is a refrigerant.
- 1 3. The method of claim 2 wherein said refrigerant is drawn from a high
2 temperature generator.
- 1 4. The method of claim 3 wherein the refrigerant is gravity feed to the
2 evaporator through a feed line.
- 1 5. The method of claim 4 that includes the further step of mounting a
2 normally closed solenoid valve in said feed line, said valve being arranged to open
3 when the shut down procedure is initiated.
- 1 6. The method of claim 1 wherein said working fluid is an absorptive
2 solution.
- 1 7. The method of claim 6 wherein said solution is drawn from a system
2 condenser.
- 1 8. The method of claim 7 wherein said solution is gravity feed to the
2 evaporator through a feed line.

1 9. The method of claim 1 that includes the further step of maintaining
2 the refrigerant pump operative upon initiation of the shut down procedure whereby
3 the working fluid in the evaporator sump is re-circulated through the evaporator.

1 10. The method of claim 6 wherein said solution is drawn from the
2 absorber.

1 11. Apparatus for preventing water in the chilled water tubes of an
2 absorption machines evaporator from freezing in the event the chilled water flow
3 through the evaporator is terminated, wherein said apparatus includes:
4 means for sensing the flow of chilled water through the evaporator and
5 sending a signal to a programmed controller for shutting down said machine,
6 a feed line for delivering a high temperature working fluid to the evaporator;
7 and
8 a remotely controlled normally closed, valve in the feed line which is opened
9 by a signal from said controller when the chilled water flow has terminated whereby
10 said high temperature working fluid is delivered into the evaporator.

1 12. The apparatus of claim 11 wherein said feed line is arranged to
2 connect a high temperature generator with the evaporator to feed refrigerant from
3 said generator to said evaporator.

1 13. The apparatus of claim 12 wherein the refrigerant is gravity feed into
2 said evaporator.

1 14. The apparatus of claim 11 wherein said feed line is arranged to feed
2 solution from a condenser to the evaporator